

CLAIMS

1) Multi-device false-twisting machine, especially for treating threads before they are woven in all types of looms and needle knitting machines, characterised in that:

5 a) it is composed of a fixed frame (3) that may be provided with adjustable parts on which the false-twisting devices are mounted, these devices being of any of the types known in the art, said adjustable frame being provided with a variable number of said devices depending on the number of needles that the loom or knitting machine has, and by means of programming and control of the false-twisting operation variables such as the degree of false-twisting generated by the device (4), and the sequence of rotation movements and stops, if set, in each cycle, all of which is set and programmed depending on the characteristics, including that of the thread being previously twisted, and needs of the thread to be processed;

10 b) it is situated, on the loom or knitting machine, at an intermediate point between the input creel and the needles (8) of the loom or knitting machine in the direction of movement of the thread, that is as an on-line process with the posterior weaving process, at an appropriate distance and orientation in relation to the needles (8) of the loom or knitting machine, with the objective that the threads proceeding from the spools of the input creel should pass, before reaching the needles, through the false-twisting devices (4) and that the false-twist effect produced by the devices should reach the needles of the loom or knitting machine;

15 c) by activating the respective false-twisting devices, in the threads that reach the respective needles on the loom or knitting machine it generates the necessary and pre-set degree of provisional twist as established by said means of programming in order to obtain roundness in the threads, reduce or eliminate loosenings, loops and irregularities, thus eliminating the trouble that

20

25

30

said loosenings or irregularities often cause upon becoming entangled with the needles; and

2) Multi-device false-twisting machine, especially for treating threads before they are woven in all types of looms and needle knitting machines, according to the first 5 claim, characterised in that said machine is combinable with any type of needle loom, needle knitting machine, needle braiding machine, etc

10

15

20

25

30